

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Ana Pinto

Reviewed by: Linda Martin

GENERAL INFORMATION:

Name:	Ken Dec Inc.
Address:	1145 South Dixie Hwy Horse Cave, KY 42749
Date application received:	6/5/2007
SIC Code/SIC description:	3471, Electroplating, Plating, Polishing, Anodizing, and Coloring
Source ID:	21-099-00018
Agency Interest:	1780
Activity:	APE20070001
Permit:	F-07-037

APPLICATION TYPE/PERMIT ACTIVITY:

<input checked="" type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
<input type="checkbox"/> Administrative	<input type="checkbox"/> Title V
<input type="checkbox"/> Minor	<input type="checkbox"/> Synthetic minor
<input type="checkbox"/> Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS	<input checked="" type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☒ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual (tpy) ¹	Potential (tpy)
PM/PM ₁₀	3.7	109.5
SO ₂	0.017	0.16
NO _x	7.44	18.61
CO	0.83	13.86
VOC	40.54	117.4
Single HAPs > 10 tpy		
Methyl Isobutyl Ketone (108-38-3)	--	12.0
Toluene (108-88-3)	--	11.0
Xylene (1330-20-7)	--	23.4

¹ Actual emissions are from the Kentucky Division for Air Quality's Emissions Inventory report.

SOURCE DESCRIPTION:

Operations at Ken-Dec facility include zinc die-casting and electroplating (copper, nickel and chrome). Ken-Dec's chromium electroplating facility consists of three (3) separate electroplating lines. Other activities at the facility consist of nonferrous foundry, polishing, titanium die castings, beryllium die castings, precious metal die castings, and copper die castings. There are aluminum die casting units present at the facility; however, they have been idle. There are also three natural gas fired boilers and two natural gas fired drying ovens.

Ken-Dec has been operating under permits S-95-252, S-95-253, and S-96-152. In January 22, 2001 Ken-Dec submitted a letter to the Division requesting a permit renewal. In June 5, 2007 Ken-Dec submitted a revised permit renewal application to the Division. Since emissions of VOC, Single HAP, Combined HAP and Particulate Matter (PM₁₀) are greater than the TV thresholds, Ken-Dec has requested voluntary regulated pollutant emission limitations for this approval to be issued as a source wide Conditional Major permit pursuant to 401 KAR 52:030. This permit will be issued as the initial Conditional Major for the source.

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

- To preclude the applicability of 401 KAR 52:020, *Title V Permits*, the total annual source-wide particulate matter (PM₁₀) emissions shall not exceed the 90 tons per year for each twelve (12) consecutive months. VOC emissions shall not exceed 90 tons for each twelve (12) consecutive months. Individual HAP shall not exceed 9 tons for each twelve (12) consecutive months, and combined HAP shall not exceed 22.5 tons for each twelve (12) consecutive months.
- For EPs 30 and 32, pursuant to 40 CFR 63.342(d)(2), if a chemical fume suppressant containing a wetting agent is used, the permittee shall not allow the surface tension of the electroplating or

anodizing bath contained within the affected source to exceed 45 dynes/cm (3.1×10^{-3} lbf/ft) as measured by a stalagmometer or 35 dynes/cm (2.4×10^{-3} lbf/ft) as measured by a tensiometer at any time during operation of the tank.

OPERATIONAL FLEXIBILITY:

None